Birth Defects Profile in Michigan Prosperity Region 4

(Allegan, Barry, Ionia, Kent, Lake, Mason, Mecosta, Montcalm, Muskegon, Newaygo, Oceana, Osceola, and Ottawa counties)



Michigan Birth Defects Registry (MBDR)

- By law, hospitals and medical labs report certain health conditions affecting children at birth or up to 2 years of age.
- ❖ MBDR information is confidential. It is used to:
 - Calculate baseline rates.
 - Analyze trends.
 - Identify and respond to public health concerns.
- MBDR data helps us understand health and development needs, identify causes, and share prevention strategies.

Birth Defects in Region 4 (2013-2019)

- An average of 19,391 infants born in Region 4 each year.
- Approximately 1,925 of these infants were born with a birth defect each year.
- Hypospadias and Trisomy 21 were the most prevalent birth defects in Michigan and Prosperity Region 4 (Table 1).
- The prevalence of all other birth defects was similar between Prosperity Region 4 and Michigan as a whole.



Table 1. Prevalence of Selected Birth Defects within Prosperity Region 4 and the State of Michigan, 2013-2019

	Prosperity Region 4		Michigan	
Birth Defect	Number of Cases	Prevalence (per 10,000 live births)	Number of Cases	Prevalence (per 10,000 live births)
Anencephaly	29	2.1	69	0.9
Cleft Lip with Cleft Palate	92	6.8	517	6.6
Cleft Lip without Cleft Palate	60	4.4	264	3.4
Cleft Palate without Cleft Lip	83	6.1	541	6.9
Gastroschisis	60	4.4	321	4.1
Hypoplastic Left Heart Syndrome	60	4.4	308	3.9
Hypospadias	585	43.1	3052	39.0
Limb Deficiencies	55	4.1	308	3.9
Spina Bifida	56	4.1	326	4.2
Tetralogy of Fallot	77	5.7	406	5.2
Transposition of the Great Arteries	65	4.8	298	3.8
Trisomy 21	203	15.0	1010	12.9
Total Number of Live Births	135,736		782,227	

MBDR Data Limitations and Cautions

- Data are based on passive reporting, which means MBDR relies on facilities to identify and report cases of birth defects. Getting all facilities to report complete and timely data can be a challenge.
- Some facilities report children with a birth defect that is later "ruled out" resulting in an overcount of the actual number of
 cases.
- Children diagnosed and treated in facilities in other states may be missed, which will significantly affect the completeness of data for Michigan's border counties.

Birth Characteristics among all Mothers and Babies

Between 2013 and 2019, roughly 19,391 babies were born in Prosperity Region 4 each year.

During an average year in Prosperity Region 4:

Mother's Race and Ethnicity

- ❖ 14,440, or 74 percent of, infants were born to white, non-Hispanic mothers.
- ❖ 1,690, or 9 percent of, infants were born to Black, non-Hispanic mothers.
- 1,030, or 5 percent of, infants were born to all other non-Hispanic mothers.
- 2,250, or 12 percent of, infants were born to Hispanic mothers.

Mom's Socioeconomic and Educational Status

- 7,390, or 38 percent of, all births reported Medicaid as the intended payer.
- 2,260, or 12 percent of, infants were born to mothers with less than a high school education.
- ❖ 5,320, or 27 percent of, infants were born to mothers who had a high school education.
- 5,710, or 29 percent of, infants were born to mothers who had some college or an associate degree.
- **❖ 6,050**, or **31 percent** of, infants were born to mothers who had a **college degree**.

Data source: Michigan resident live birth files, MDHHS, Division of Vital Records and Health Statistics, 2013-2019.





Mom's Age

- **❖ 1,070**, or **6 percent** of, infants were born to **teenage** mothers (15 to 19 years).
- ❖ 15,940, or 82 percent of, infants were born to mothers 20 to 34 years of age.
- 2,370, or 12 percent of, infants were born to mothers 35 years of age or older.

Mom and Baby Health Before, During, and After Pregnancy

- 10,790, or 56 percent of, infants were born to mothers who were overweight or obese.
- 2,840, or 15 percent of, infants were born to mothers who used tobacco during pregnancy.
- 2,180, or 11 percent of, infants were born prematurely.
- ❖ 1,490, or 8 percent of, infants were born at a low birth weight.
- ❖ 150, or less than 1 percent of, infants were born to mothers who had prepregnancy diabetes type 1 or type 2.



